
Task Order No. 7
Contract No. 223-94-8031

**Summary of Price Movements,
Compliance Patterns, and Enforcement
Issues for the Final Rule to Reduce the
Risk of an Outbreak of Transmissible
Spongiform Encephalopathies (TSEs)
in the United States**

Final Report - Update
March 2, 1998

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E A S T E R N R E S E A R C H G R O U P , I N C .

1.0 INTRODUCTION

On August 4, 1997, the U.S. Food and Drug Administration (FDA) implemented a regulation to prevent an outbreak of Transmissible Spongiform Encephalopathies (TSEs). This report updates to February 1998 the recent meat and bone meal (MBM), tallow, and hide price movements (Section 2.0); the compliance patterns that have developed in the various industry sectors (Section 3.0); and the enforcement issues that FDA continues to face (Section 4.0).

ERG gathered the data for this report from a number of interviews with personnel in the rendering, feed, and animal producing industries, and from discussions with our project consultant, Dr. Fred Bisplinghoff. For almost all comments made, we have received at least two opinions or comments that agree with each assertion. We have noted any dissenting opinions.

As of February 1998, several market adjustments to the regulation have become clear. Furthermore, a downturn in Asian economics has created an additional exogenous change in market conditions. These adjustments and influences are described below.

2.0 RECENT PRICE MOVEMENTS

2.1 MBM Prices

- The price for mixed species MBM has declined over the last 6 months relative to its competing product, 48 percent soybean meal. Mixed species MBM, which historically has sold at a premium of \$5 to perhaps \$40 per ton over 48 percent soybean meal, is currently selling at approximately \$40 per ton less than 48 percent soybean meal.

Table 1 presents monthly prices for mixed species MBM and 48 percent soybean meal from June 1997 through February 1998. The data from this table are also presented in two figures:

Figure 1—the comparison of mixed species MBM and average 48 percent soybean meal prices

Figure 2—the price differential between mixed species MBM and 48 percent soybean meal

- Due to several apparent market influences, the price for mixed species MBM has fallen approximately \$100 per ton since the FDA rule went into effect on August 4, 1997. Specifically:
 - As FDA intended, renderers reported that the beef and dairy cattle markets for mixed species MBM have been eliminated.
 - The price for 48 percent soybean meal has fallen by approximately \$80 per ton from August 1997 to February 1998. Mixed species MBM would normally be expected to decline an equal amount.

Table 1

**Monthly Mixed Species MBM and Soybean Meal Prices per Ton
June 1997 through February 1998**

	Mixed Species MBM 50 % Protein, Illinois	Soybean Meal 48% protein, Central Illinois, rail			Difference Between Mixed Species MBM and Soybean Meal Prices (a)
		Low	High	Average	
June 9, 1997	\$280.00	\$277.00	\$285.00	\$281.00	(\$1.00)
July 14, 1997	\$280.00	\$279.50	\$287.50	\$283.50	(\$3.50)
August 11, 1997	\$267.50 (b)	\$264.00	\$272.00	\$268.00	(\$0.50)
September 8, 1997	\$275.00	\$300.00	\$309.00	\$304.50	(\$29.50)
October 13, 1997	\$280.00	\$240.50	\$250.50	\$245.50	\$34.50
November 10, 1997	\$227.50 (b)	\$242.00	\$249.00	\$245.50	(\$18.00)
December 8, 1997	\$230.00	\$237.50	\$247.50	\$242.50	(\$12.50)
January 12, 1998	\$210.00	\$197.50	\$204.50	\$201.00	\$9.00
February 9, 1998	\$160.00	\$202.00	\$204.00	\$203.00	(\$43.00)

(a) The difference between the mixed species MBM price and the average soybean meal price.

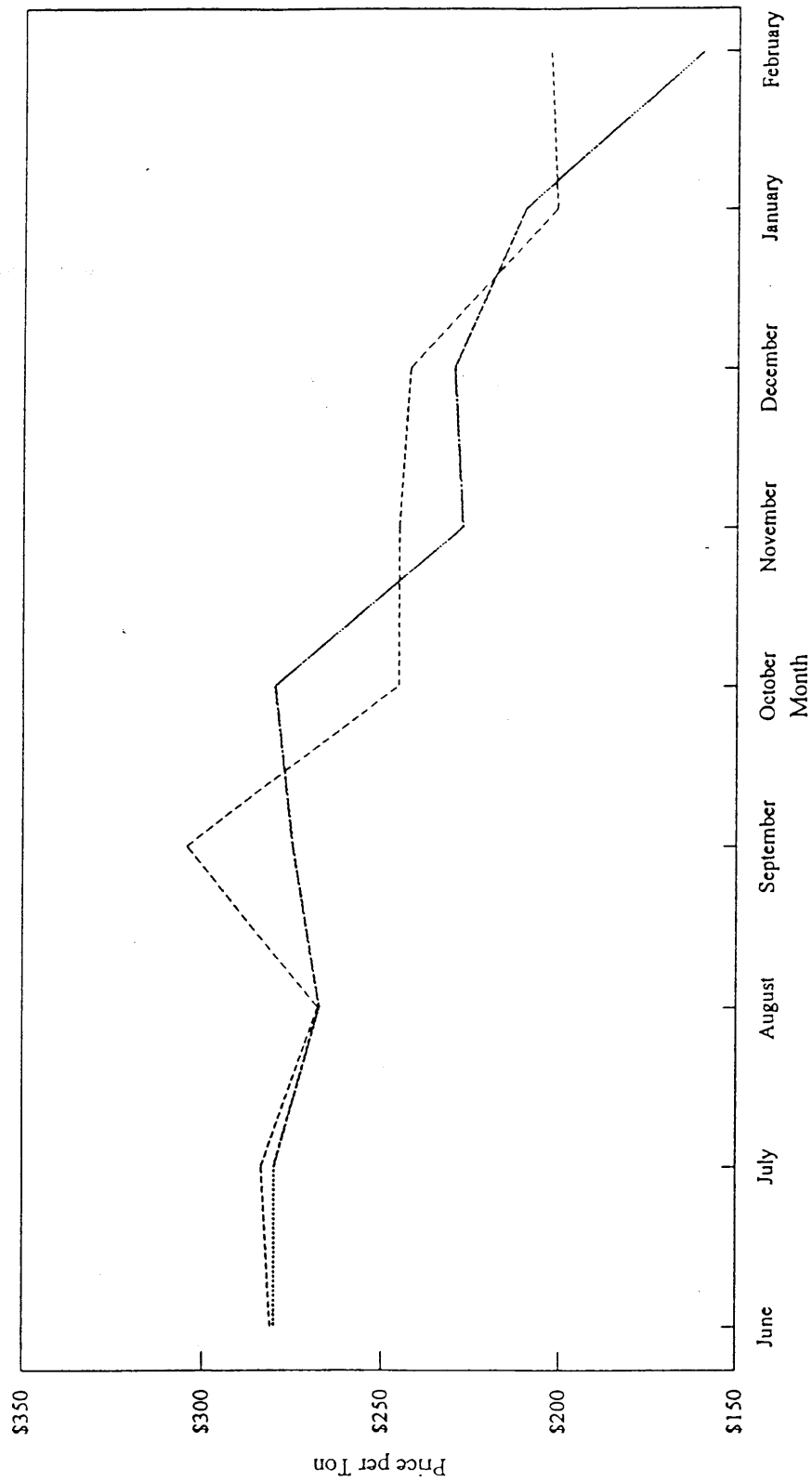
(b) The Wall Street Journal reported a range of mixed species MBM prices for these days.

For the purposes of this table the midpoint is presented.

Source: Wall Street Journal, Daily Cash Prices, 1997 and 1998.

Comparison of Mixed Species MBM and 48 Percent Soybean Meal Prices

June 1997 through January 1998



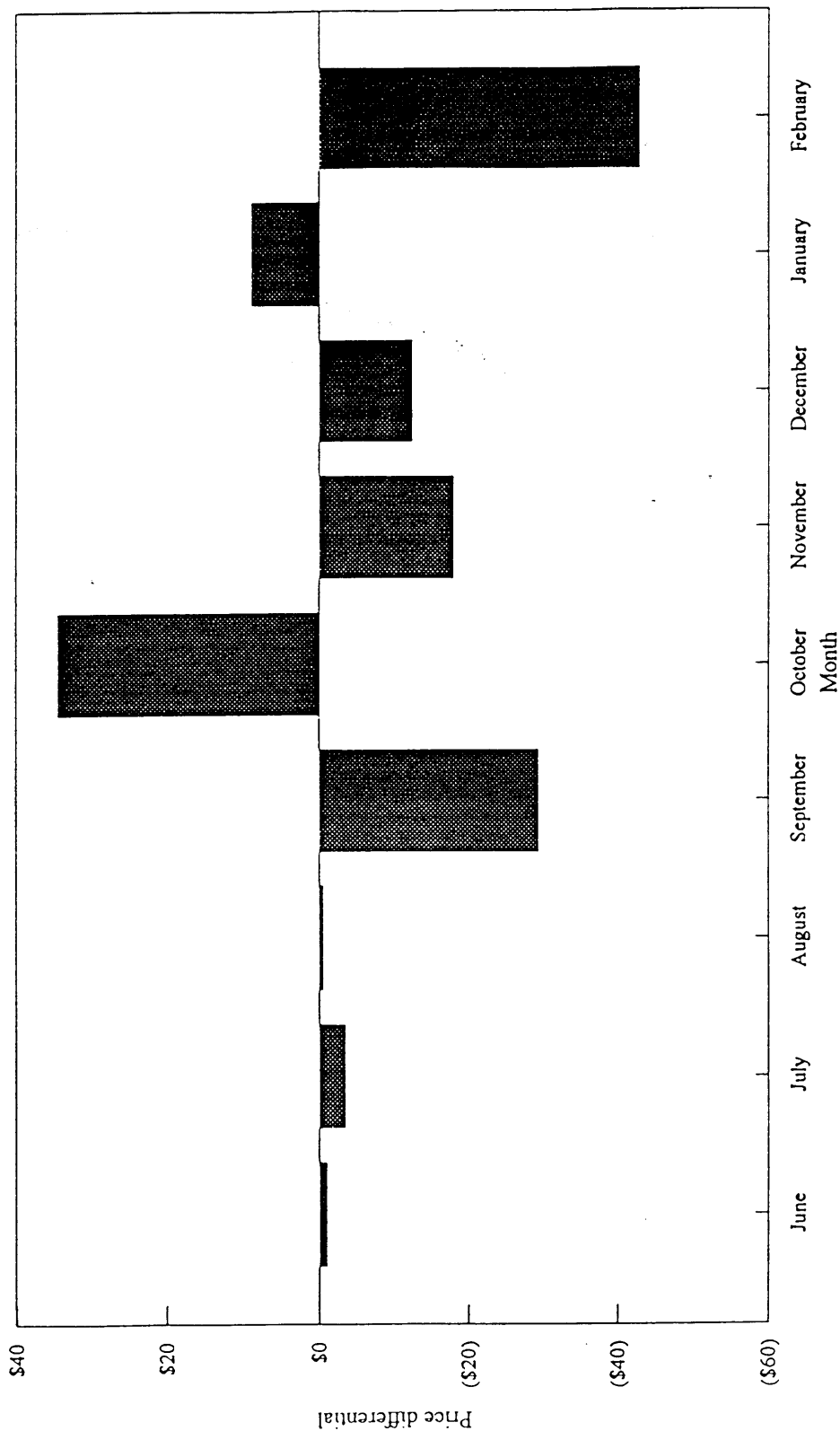
..... Mixed Species MBM
 --- 48 Percent Soybean Meal (ave.)

Source: Wall Street Journal, 1997 and 1998.

Figure 1

Price Differential Between Mixed Species MBM and 48 Percent Soybean Meal

June 1997 through January 1998



Source: Wall Street Journal, 1997 and 1998.

Figure 2

- The economic decline among Southeast Asian nations has reduced MBM exports to these countries. Renderers had pursued these markets to replace the domestic customers lost because of the TSE regulation.
- Given the historic range of relative price swings, it is not possible to determine whether a permanent market shift has occurred.
- As stated in our September 1997 report, pure porcine MBM has historically sold at a premium over mixed species MBM because of its desirability as a pet food ingredient. This price differential increased in the late summer and early fall of 1997 to approximately \$50 to \$80 per ton over mixed species MBM. However, this premium has recently moderated due in part to recent increases in swine slaughtering and the resulting increase in supply of animal protein in the market. The premium for pure porcine MBM is currently approximately \$10 to \$20 per ton.
- While some commodity price services have started to publish prices for both mixed species MBM and porcine MBM, others found that their customers had little interest in separate pricing and have reverted to reporting only the price for mixed species MBM. Industry representatives also stated that reporting porcine MBM prices is difficult because these prices are often based on private contracts and are highly variable with local conditions.
- To help replace customers lost due to the TSE regulation and the Southeast Asian market downturn, some companies have increased the use of brokers to help sell their mixed species MBM. The brokers' fees, normally \$5 to \$10 per ton, reduce the renderers' revenue. While some renderers reported in the fall of 1997 that they hoped to eliminate brokers from their marketing program, the Asian market collapse has made it difficult for some to find new markets without brokers' assistance. Brokers often have more numerous contacts outside of a renderer's normal sales area, and this is essential for finding alternative markets for MBM.

2.2 Tallow and Hide Prices

- Currently, bleachable tallow is selling for approximately \$0.15 per pound, which is \$0.07 per pound lower than one year ago (Wall Street Journal, 1998). Tallow prices have been restrained by the lack of a clear ruling on the use of tallow by the European Union (EU). Industry representatives indicated that although European refiners and producers are currently allowed to import and use tallow, many anticipate an EU tallow restriction and have been purchasing palm oil or, to a lesser extent, coconut oil.
- Hide prices have also decreased due to the Asian economic decline. For example, Korea has virtually stopped purchasing hides, severely impacting the U.S. market (Lucchietti, 1998). The U.S. hide industry exports account for 60 percent of sales. Currently, steer hides are selling at approximately \$70 to \$80 per pound, which is approximately \$10 to \$20 per pound lower than one year ago (Wall Street Journal, 1998).

2.3 Pickup Charges

- Some renderers have initiated or increased charges for dead stock and supermarket pickups to offset lower tallow, hide, and MBM prices. One renderer judged that these charges have reduced the number and frequency of deadstock pickups although the exact decrease is uncertain due to the mild winter in the Midwest. Another industry contact predicted that more renderers will institute or increase pickup charges if the MBM price does not increase over the next several months.
- The American Association of Meat Processors (AAMP), which represents small- and medium-sized meat slaughterers and processors, is currently investigating the impact of the regulation on their members and should have more information on these impacts later in March 1998. ERG will forward any relevant AAMP information on impacts to FDA when it is available.

3.0 COMPLIANCE PATTERNS

Contacts with industry have indicated that compliance is quite high and may be virtually complete in the rendering and feed manufacturing sectors. Downstream industry sectors, such as feed dealers and on-farm mixers, are less informed on the regulation and may have lower levels of compliance.

3.1 Renderers

- As reported in the September 1997 report, most independent renderers continue to consider raw material separation within an industrial plant (to allow production of both restricted and unrestricted MBM) to be uneconomical. The erosion of the price spread between porcine and/or poultry MBM and mixed species MBM have decreased the financial incentives to separate.
- The rendering industry is well informed on the regulation. Companies have participated in numerous seminars on the TSE regulation and have been involved with the regulation from the beginning.
- One rendering company executive stated that they are still in the position of educating their customers about the TSE regulation. For example, when the regulation went into effect they had a number of accounts calling to ask why the MBM label was stamped, "Do not feed to ruminants."
- A second rendering company representative stated that the independent trucking industry was not well informed on the TSE regulation. His company has a form for the trucker to complete describing the truck contents prior to pickup and if the truck was cleaned. The form is intended to provide information needed to prevent contamination of MBM products. For the first several months after the rule went into effect, this company found that truckers did not know what was expected of them; this company still is not totally confident that independent truckers understand the TSE regulation.

Renderers are also reported to be attempting to exploit new markets for their products:

- Export sales to South America and the Middle East may provide some relief for the lost markets in South East Asia. Some customers in these countries find U.S. MBM at current prices to be an attractive protein source for livestock. Industry personnel indicated that U.S. MBM is considered to be of higher quality than the domestically produced MBM in these countries.
- The El Niño weather pattern has created a shortfall of fishmeal production from major suppliers in Peru and Chile. Fishmeal is a protein product used in aquaculture, as well as for poultry and hog feeds. Renderers are currently attempting to sell to the aquaculture markets, and industry representatives reported increased shipments to some domestic and international aquaculture companies.

3.2 Protein Blenders

Protein blenders work closely with smaller rendering companies which do not have the ability to grind or blend their intermediate animal protein products (i.e., cracklings) on their own. Industry contacts have indicated that these blenders are well informed about the regulation because of their contact with renderers.

3.3 Feed Manufacturers

Feedmill responses to the TSE regulation thus far suggest a high level of compliance. For example, most small mills are not handling any mixed species MBM but are using unrestricted (e.g., porcine or poultry) MBM or vegetable-based protein supplements, thereby virtually ensuring that restricted MBM is not used inappropriately. ERG was not able to estimate the share of small feedmills that continue to use mixed species MBM.

Discussions with an official at the American Feed Industry Association (AFIA) outlined the extent to which they have attempted to inform their members of the regulation. AFIA has sent mailings to 3,000 establishments, circulated compliance notes, and written articles in numerous trade magazines, including *Feedstuffs* magazine which has a circulation of about 25,000.

Industry representatives have stated that they continue to find customers who do not understand why they may not include mixed MBM in their ruminant rations.

Major feed manufacturers are using several methods to achieve compliance. Some manufacturers use separate production runs and then flush the restricted product from the system. Others are separating their production operations to allow simultaneous production of restricted and unrestricted feed. Others have discontinued the use of restricted MBM.

- One feed manufacturer that operates "full-line" plants (i.e., those that manufacture a variety of feed mixes including pet food and dairy feeds) encountered higher compliance costs due to the regulation than they originally anticipated. This manufacturer found that they had to

develop an extensive quality control program to deal with broken pet food bags and "set asides" from manufacturing pet food. Set asides are those feed products that are manufactured early in a batch but that are overcooked or otherwise do not meet the finished product specifications. These set asides, along with the material from the broken bags, are normally sifted and recycled into the manufacturing process. Due to the regulation, however, the feed manufacturer was required to install a second sifting bin to segregate set asides with restricted and unrestricted MBM. This manufacturer estimated that the annual costs to comply with the regulation is approximately \$25,000 per feedmill.

- Feedmill operators reported that they have been passing the lower costs of MBM on to their customers.

3.4 Feed Mixers and Dealers

A few feedmill industry contacts reported that some feed mixers and dealers may be out of compliance with various parts of the final regulation. These contacts have indicated that this noncompliance occurs because of a lack of understanding of the regulation or because it is easier and cheaper for the smaller facilities to use mixed MBM in ruminant feed.

The industry contacts felt that these smaller dealers might be uninformed because they do not belong to the national or state feed associations. These independent dealers may be affiliated with a major feed manufacturer (i.e., Ralston-Purina, Agway, etc.) but because of the volatile nature of the feed market, these larger feed companies have limited market power to compel compliance by dealers. Some feed manufacturers have attempted to exert more power over these dealers by requiring signed agreements stipulating that the TSE regulation will be followed.

3.5 On-Farm Mixers

Industry representatives, including an official with the Milk Producer's Council, stated that they had heard of dairy farmers who were attempting to buy restricted MBM. These farmers reportedly feel there is no BSE risk to their cows and that FDA has needlessly eliminated a product that helped them produce more milk. Beyond receiving comments from three industry contacts, ERG was not able to substantiate this pattern of noncompliance further.

In 1997 the National Milk Producer's Federation (NMPF) conducted a survey of over 5,000 dairy producers in which a majority of farmers reported that they did not use ruminant MBM while those that did were willing to stop (NMPF, 1997). Thus, to extent that the NMPF membership represents all on-farm mixers, noncompliance might be somewhat isolated.

4.0 ENFORCEMENT ISSUES

Industry personnel have indicated that enforcement of the regulation by FDA and state regulatory personnel at the feedmill, dealer, and on-farm levels will be difficult. They have also indicated that there will continue to be some level of noncompliance until the regulating bodies make their presence more widespread.

Several industry personnel expressed concern that the ban will continue to be essentially voluntary until inspections of feed dealers and on-farm mixers are conducted. These contacts doubted that these inspections can be adequately carried out with the current resources of FDA and the states.

There are several new issues that contribute to the difficulty of enforcement:

- Discussions with industry representatives uncovered disagreement over the adequacy of the "Inspections for Compliance with 589.2000" which was attached to the assignment memorandum CVM issued on January 29, 1998. One dairy industry representative felt that the newly released inspector's compliance guide was written in heavy legal language that made the regulation too complex and would lead to uneven enforcement of the regulation. While rendering industry contacts also stated that when they reviewed the guide, they had no major criticism.
- There are a large number of entities that will have to be inspected for compliance with the TSE regulation including renderers, protein blenders, independent feed dealers, and on-farm mixers. Some smaller facilities might feel that the likelihood of inspection is so small that they will not consider compliance to be essential.

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